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| EXAMINER |
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| PATEL, DHAIRYA A |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 09/993,865 | CULLEN ET AL. |
| | Examiner | Art Unit | |
| | Dhairya A. Patel | 2151 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>09 November, 2007</u>.

2a)☒ This action is **FINAL.**　　2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1 and 3-31* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

## DETAILED ACTION

1. This action is responsive to communication filed on 11/9/2007. Claims 1,3-31

are presented for examination. Claim 2 is cancelled.

2. This amendment has fully considered and entered.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1,3,7-12,16-17,20-25,28-31 rejected under 35 U.S.C. 103(a) as being

unpatentable over Chandrasekaran et al. U.S. Patent # 6,397,352 (hereinafter

Chandrasekaran) in view of Hamada et al. U.S. Patent # 5,596,720 (hereinafter

Hamada)

As per claim 1, Chandrasekaran teaches a method of handling a message received

at a messaging system server, the method comprising:

-storing, in non-persistent storage, the message; (Fig. 2A element 204) (column

6 lines 61-67) (column 7 lines 1-2).

The reference teaches the message is stored in the propagation queue (non-

persistent storage).

-attempting to deliver the message (column 10 lines 44-49);

The reference teaches attempting to deliver the messages stored in the non-

persistent storage (volatile memory)

-determining whether the attempting to deliver was successful (column 11 lines 8-22);

The reference teaches storing in a table within non-volatile memory a message w/ UID value and initial states "prepared". The prepared state indicates the message has been sent but that an acknowledge message has not yet been received for the message from the destination site (determining whether the attempting to deliver was successful)

-if the attempting to deliver the message was successful, removing, the message from the non-persistent storage (Fig. 3 element 308) (column 10 lines 50-51)(column 11 lines 33-43)(column 13 lines 44-50)(column 14 lines 1-5) and;

The reference teaches after the successful attempt to delivery the message at the destination site, removing the message from propagation queue (non-persistent storage).

-after the delay interval has elapsed saving the message to persistent storage so that message can be retrieved and delivered (column 7 lines 31-39)(column 10 lines 43-67)(column 11 lines 1-22).

In column 10 lines 43-67, column 11 lines 1-22, Chandrasekaran teaches the message is in the propagation queue which is non-persistent storage (volatile) and transmitting the message to the destination site, and still storing the message in the propagation queue (Fig. 3 element 312)(storing message in non-persistent storage) because the acknowledge message has not yet been received (responsive to the attempt not being successful), the propagation process then receives message data

(content of the message) to store in durable or non-volatile memory (persistent storage) at the source site and by maintaining the propagated message data in a nonvolatile memory (column 7 lines 30-39) a recovery mechanism is provided that allows the source site to determine whether the message has been sent to the destination site.

Chandrasekaran is silent in teaching if the attempting to deliver the message was not successful, continuing to store the message in the non-persistent storage for a delay interval; after the delay interval has elapsed saving the message to the persistent storage so that message can be retrieved and delivered. Hamada teaches if the attempting to deliver the message was not successful, continuing to store the message in the non-persistent storage for a delay interval (column 7 lines 55-64) after the delay interval has elapsed saving the message to the persistent storage so that message can be retrieved and delivered (Fig. 21 element 101-5, 201-5)(column 17 lines 35-65)(Fig. 23). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Chandrasekaran's teaching in Hamada's teaching to come up storing message in non-persistent storage for an interval and retrieving and delivering the message that is save in the persistent storage. The motivation for doing so would be so the message can be retrieved from the non-volatile memory and retransmitted or re-sent to the receiver or the destination at a later time, therefore non-volatile/persistent storage is used to save the message for later retransmission.

As per claim 3, Chandrasekaran, Hamada teaches the method of claim 1, but Chandrasekaran further teaches wherein storing in the non-persistent storage

comprises storing in a log queue. (Fig. 2A element 204) (Column 6 lines 61-67)

(Column 7 lines 1-2).

As per claim 7, Chandrasekaran, Hamada teaches the method of claim 1, but

Chandrasekaran further teaches further comprising determining the delay interval.

(Column 8 lines 20-39)

As per claim 8, Chandrasekaran teaches the method of claim 7, wherein

determining the delay interval comprises: determining at least one metric based on

messages handled by the server; and determining the delay interval based on the at

least one metric (column 8 lines 20-39). The reference teaches adding a priority

attribute to determine when the messages are sent to the destination site. Therefore

each message is going to be given a number, which is basically like keeping a count of

number of messages handled by the server. Therefore since the server is going to give

priority value to each message and also associated with the message is the UID, which

is identifying the message, the server knows how many messages are handled by the

server by which it will find out when these messages in the queue will be delivered to

the destination site.

As per claim 9, Chandrasekaran teaches the method of claim 8, wherein the

metric comprises a metric based on a number of sending clients using the server to

deliver messages. (Column 8 lines 20-47). The reference teaches the propagation

queue having a UID, and priority value (Fig. 2A) assigned to each message. Therefore

since there is UID for each message, which is like keeping count of the messages, so in

order to send a message a client has to be present therefore since the numbers of

messages are known which is equal to number of sending clients using the server to

deliver the messages.

As per claim 10, Chandrasekaran teaches the method of claim 7, wherein

determining the delay interval comprises dynamically determining the delay. (Column 8

lines 20-47)

As per claim 11, Chandrasekaran, Hamada teaches the method of claim 1, but

Chandrasekaran further teaches wherein the message was received over a

communications network. (Fig. 13 element 728,722,726,720)

As per claim 12, Chandrasekaran, Hamada teaches the method of claim 1, but

Chandrasekaran further teaches wherein the messages comprise a guaranteed

messages; (column 7 lines 39-57) and wherein the messaging system comprises a

message-oriented middleware system. (Column 7 lines 27-38)

The reference teaches sends the commit messages (guaranteed messages) to

the destination site to indicate the transaction (transferring) should be committed. The

reference also teaches that messages are maintained in the non-volatile memory at the

source site until they are transferred to the destination site. Therefore in case of the

source site failure, destination site will fetch the message from the non-volatile memory

from the source site.

As per claim 16, Chandrasekaran teaches a computer program product,

disposed on a computer readable medium, for handling messages received at a server,

the computer program including instructions for causing a server processor to:

-store, in a non-persistent storage (Fig. 2A element 204), messages received

from at least one client as the messages are received; (column 6 lines 61-67) (column

7 lines 1-2)

The reference teaches the message is stored in the propagation queue (non-

persistent storage).

-attempt to deliver one of the messages stored in the non-persistent storage

(column 10 lines 44-49);

The reference teaches attempting to deliver the messages stored in the non-

persistent storage (volatile memory)

-determining whether the attempt to deliver was successful (column 11 lines 8-

22);

The reference teaches storing in a table within non-volatile memory a message

w/ UID value and initial states "prepared". The prepared state indicates the message

has been sent but that an acknowledge message has not yet been received for the

message from the destination site (determining whether the attempting to deliver was

successful)

-if the attempt to deliver the message was successful, remove, the message from

the non-persistent storage (Fig. 3 element 308) (column 10 lines 50-51)(column 11 lines

33-43)(column 13 lines 44-50)(column 14 lines 1-5) and;

The reference teaches after the successful attempt to delivery the message at

the destination site, removing the message from propagation queue (non-persistent

storage).

-after the delay interval has elapsed saving the message to persistent storage sot
that message can be retrieved and delivered (column 7 lines 31-39)(column 10 lines 43-
67)(column 11 lines 1-22).

In column 10 lines 43-67, column 11 lines 1-22, Chandrasekaran teaches the
message is in the propagation queue which is non-persistent storage (volatile) and
transmitting the message to the destination site, and still storing the message in the
propagation queue (Fig. 3 element 312)(storing message in non-persistent storage)
because the acknowledge message has not yet been received (responsive to the
attempt not being successful), the propagation process then receives message data
(content of the message) to store in durable or non-volatile memory (persistent storage)
at the source site and by maintaining the propagated message data in a nonvolatile
memory (column 7 lines 30-39) a recovery mechanism is provided that allows the
source site to determine whether the message has been sent to the destination site.

Chandrasekaran is silent in teaching if the attempting to deliver the message was
not successful, continuing to store the message in the non-persistent storage for a delay
interval; after the delay interval has elapsed saving the message to the persistent
storage so that message can be retrieved and delivered. Hamada teaches if the
attempting to deliver the message was not successful, continuing to store the message
in the non-persistent storage for a delay interval (column 7 lines 55-64) after the delay
interval has elapsed saving the message to the persistent storage so that message can
be retrieved and delivered (Fig. 21 element 101-5, 201-5)(column 17 lines 35-65)(Fig.
23). It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention was made to implement Chandrasekaran's teaching in Hamada's

teaching to come up storing message in non-persistent storage for an interval and

retrieving and delivering the message that is save in the persistent storage. The

motivation for doing so would be so the message can be retrieved from the non-volatile

memory and retransmitted or re-sent to the receiver or the destination at a later time,

therefore non-volatile/persistent storage is used to save the message for later

retransmission.

As per claim 17, Chandrasekaran and Hamada teaches a computer program of

claim 16, but Chandrasekaran further teaches wherein the instructions for causing the

server processor to store messages in the non-persistent storage comprise instructions

for causing the server processor to store the messages in a log queue (Fig. 2A element

204)(column 6 lines 61-67) (column 7 lines 1-2).

As per claim 20, Chandrasekaran and Hamada teaches a computer program of

claim 16, but Chandrasekaran further teaches further comprising instructions for

causing the server processor to determine the delay. (Column 8 lines 20-39)

As per claim 21, Chandrasekaran teaches the computer program of claim 20,

wherein the instructions for causing the server processor to determine the delay

comprise instructions for causing the server processor to: determine at least one metric

based on the received messages; and determine the delay based on the at least one

metric (column 8 lines 20-39). The reference teaches adding a priority attribute to

determine when the messages are sent to the destination site. Therefore each

message is going to be given a number, which is basically like keeping a count of

number of messages received. Therefore it is inherent since the server is going to give priority value to each messages and also associated with the message is the UID, which is identifying the message, the server knows how many messages are received by the server by which it will find out when these messages in the queue will be delivered to the destination site.

As per claim 22, Chandrasekaran teaches the computer program of claim 21, wherein the metric comprises a metric based on a number of clients using the server to deliver messages. (Column 8 lines 20-47). The reference teaches the propagation queue having a UID, and priority value (Fig. 2A) assigned to each message. Therefore since there is UID for each message, which is like keeping count of the messages, so it is inherent that in order to send a message a client has to be present therefore since the number of messages are known which is equal to number of sending clients using the server to deliver the messages.

As per claim 23, Chandrasekaran and Hamada teaches a computer program of claim 16, but Chandrasekaran further teaches wherein the instructions for causing the processor to determine the delay comprise instructions for causing the processor to dynamically determining the delay. (Column 8 lines 20-47)

As per claim 24-25,28-31, they teach same limitations as claims 1-17,20-23 respectively, therefore rejected under same basis.

4.  Claims 4-6,13-15,18-19,26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chandrasekaran in view of Hamada further in view of Stein et al. U.S. Patent 6,289,212 (hereinafter Stein).

As per claim 4, Chandrasekaran and Hamada teaches the method of claim 1, but

fails to teach further comprising transmitting an acknowledgement message to a client

that sent the received message, the acknowledgement message indicating that the

received message will not be lost by the server in the case of server failure. Stein

teaches transmitting an acknowledgement message to a client that sent a received

message, the acknowledgement message indicating that the received message will not

be lost by the server in the case of server failure. (Column 12 lines 21-37). It would

have obvious to one of ordinary skill in the art at the time of applicant's invention to

implement Chandrasekaran and Hamada's invention in Stein's invention to come up

with transmitting an acknowledgement message. The motivation for transmitting the

acknowledgement message is to let the user know that the message has been sent and

be delivered.

As per claim 5, Chandrasekaran and Hamada fails to teach the method of claim

4, wherein transmitting the acknowledgment message to the client comprises

transmitting the acknowledgment message to the client for successful delivery of the

received message. Stein teaches transmitting the acknowledgment message to the

client comprises transmitting the acknowledgment message to the client for successful

delivery of the received message (Column 12 lines 21-37) It would have obvious to one

of ordinary skill in the art at the time of applicant's invention to implement

Chandrasekaran and Hamada's invention in Stein's invention to come up with

transmitting an acknowledgement message. The motivation for transmitting the

acknowledgement message is to let the user know that the message has been sent and

be delivered.

As per claim 6, Chandrasekaran and Hamada fails to teach the method of claim

4, wherein transmitting the acknowledgment message to the client comprises

transmitting the acknowledgment message to the client for storage of the received

message in persistent storage. Stein teaches the method of claim 4, wherein

transmitting an acknowledgment message to the client comprises transmitting the

acknowledgment message to the client for the storage of the received message in

persistent storage. (Column 12 lines 21-37). The reference teaches that message is

sent and the facsimile message is placed in the asynchronous request queue. It would

have obvious to one of ordinary skill in the art at the time of applicant's invention to

implement Chandrasekaran and Hamada's invention in Stein's invention to come up

with transmitting the acknowledgement message for the received message's storage in

persistent storage. The motivation for doing so would have been so that the client

knows that message is going to be delivered properly.

As per claim 13, Chandrasekaran teaches a method of handling guaranteed

messages received at a message-oriented middleware server over a network, the

method comprising: storing, in a log queue in non-persistent storage guaranteed

messages received from at least one client as the guaranteed messages are received

(Fig. 2A element 204) (Column 6 lines 61-67) (Column 7 lines 1-2)(column 7 lines 28-

57);

-attempting to deliver one of the guaranteed messages stored in the non-persistent storage (column 10 lines 44-49);

The reference teaches attempting to deliver the messages stored in the non-persistent storage (volatile memory)

-determining whether the attempting to deliver one of the guaranteed messages was successful (column 11 lines 8-22);

The reference teaches storing in a table within non-volatile memory a message w/ UID value and initial states "prepared". The prepared state indicates the message has been sent but that an acknowledge message has not yet been received for the message from the destination site (determining whether the attempting to deliver was successful)

-if attempting to deliver one of the guaranteed messages was successful, removing, the guaranteed message from the non-persistent storage (Fig. 3 element 308) (column 10 lines 50-51)(column 11 lines 33-43)(column 13 lines 44-50)(column 14 lines 1-5) and;

The reference teaches after the successful attempt to delivery the message at the destination site, removing the message from propagation queue (non-persistent storage).

-dynamically determining a delay time period(Column 8 lines 20-47);

-after the determined delay period has elapsed, saving the guaranteed message to persistent storage (column 7 lines 31-39)(column 10 lines 43-67)(column 11 lines 1-22).

In column 10 lines 43-67, column 11 lines 1-22, Chandrasekaran teaches the

message is in the propagation queue (log queue) which is non-persistent storage

(volatile) and transmitting the message to the destination site, and still storing the

message in the propagation queue (Fig. 3 element 312)(storing message in non-

persistent storage) because the acknowledge message has not yet been received

(responsive to the attempt not being successful) and after a delay interval the

propagation process then receives message data (content of the message) to store in

durable or non-volatile memory (persistent storage) at the source site and by

maintaining the propagated message data in a nonvolatile memory (column 7 lines 30-

39)(emphasis added) a recovery mechanism is provided that allows the source site to

determine whether the message has been sent to the destination site.

Chandrasekaran fails to teach if attempting to deliver one of the guaranteed

message was not successful, continuing to store the guaranteed message in the non-

persistent storage and after the determined delay period has elapsed saving the

guaranteed message to the persistent storage so that the guaranteed message can be

retrieved and delivered. Hamada teaches if attempting to deliver one of the guaranteed

message was not successful, continuing to store the guaranteed message in the non-

persistent storage (column 7 lines 55-64) and after the determined delay period has

elapsed saving the guaranteed message to the persistent storage so that the

guaranteed message can be retrieved and delivered (Fig. 21 element 101-5, 201-

5)(column 17 lines 35-65)(Fig. 23). It would have been obvious to one of ordinary skill

in the art at the time of applicant's invention was made to implement Chandrasekaran's

teaching in Hamada's teaching to come up storing message in non-persistent storage

for an interval and retrieving and delivering the message that is save in the persistent

storage. The motivation for doing so would be so the message can be retrieved from

the non-volatile memory and retransmitted or re-sent to the receiver or the destination at

a later time, therefore non-volatile/persistent storage is used to save the message for

later retransmission.

Chandrasekaran fails to teach transmitting a guarantee acknowledgement

message to a client that sent the received guaranteed message whose delivery was

attempted, the guarantee acknowledgement message indicating that the message will

not be lost by the server. Stein teaches transmitting a guarantee acknowledgement

message to a client that sent the received guaranteed message whose delivery was

attempted, the guarantee acknowledgement message indicating that the message will

not be lost by the server. (column 12 lines 21-37). The reference teaches that the

facsimile message has been sent is a guaranteed message indicating the message is

not going to be lost because if the other side would not receive the fax, the message

has been sent would not be displayed.

It would have obvious to one of ordinary skill in the art at the time of applicant's

invention to implement Chandrasekaran and Hamada's invention in Stein's invention to

come up with transmitting an acknowledgement message. The motivation for

transmitting the acknowledgement message is to let the user know that the message

has been sent and be delivered.

As per claim 14, Chandrasekaran and Hamada and Stein teaches the method of claim 13, but Chandrasekaran and Hamada fails to teach transmitting the guarantee acknowledgement message comprises: if the guaranteed message was successfully delivered, transmitting the guarantee acknowledgement message; and if the guaranteed message was not successfully delivered, transmitting the guarantee acknowledgement message when the guaranteed message is persistently stored. Stein teaches transmitting the guarantee acknowledgement message comprises if the guaranteed message was successfully delivered, transmitting the guarantee acknowledgement message; and if the guaranteed message was not successfully delivered, transmitting the guarantee acknowledgement message when the guaranteed message is persistently stored. (Column 12 lines 21-37). It would have obvious to one of ordinary skill in the art at the time of applicant's invention to implement Chandrasekaran and Hamada's invention in Stein's invention to come up with acknowledgement message when the message is persistently stored if the guaranteed message not successfully delivered. The motivation for doing so would have to let the user know that the message has been received by source site and will be delivered properly.

As per claim 15, Chandrasekaran and Hamada and Stein teaches the method of claim 13, but Chandrasekaran further teaches wherein dynamically determining the delay time period comprises: determining a metric based on messages handled by the server; and determining the delay time period based on the determined metric. (Column 8 lines 20-39). The reference teaches adding a priority attribute to determine when the messages are sent to the destination site. Therefore each message is going to be

given a number, which is basically like keeping a count of number of messages handled

by the server. Therefore it is inherent since the server is going to give priority value to

each messages and also associated with the message is the UID, which is identifying

the message, the server knows how many messages are handled by the server by

which it will find out when these messages in the queue will be delivered to the

destination site.

As per claim 18, Chandrasekaran and Hamada teaches the computer program of

claim 16, but fails to teach further comprising instructions for causing the server

processor to transmit an acknowledgement message to a client that sent the received

message whose delivery was attempted, the acknowledgement message indicating

that the received message will not be lost by the server. Stein teaches instructions for

causing the server processor to transmit an acknowledgement message to a client that

sent a received message whose delivery was attempted, the acknowledgement

message indicating that the received message will not be lost by the server. (Column 12

lines 21-37). It would have obvious to one of ordinary skill in the art at the time of

applicant's invention to implement Chandrasekaran and Hamada's invention in Stein's

invention to come up with transmitting an acknowledgement message. The motivation

for transmitting the acknowledgement message is to let the user know that the message

has been sent and be delivered.

As per claim 19, Chandrasekaran and Hamada fails to teach the computer

program of claim 18, wherein the instructions for causing the server processor to

transmit the acknowledgment message to the client comprise instructions for causing

the server processor to transmit the acknowledgment message to the client for a

message saved from non-persistent storage to persistent storage. Stein teaches the

computer program of claim 18, wherein the computer program instructions for causing

the server processor to transmit an acknowledgment message to the client comprise

instructions for causing the server processor to transmit the acknowledgment message

to the client for a message saved from non-persistent storage to persistent storage.

(Column 12 lines 21-37). The reference teaches that message is sent and the facsimile

message is placed in the asynchronous request queue. It would have obvious to one of

ordinary skill in the art at the time of applicant's invention to implement Chandrasekaran

and Hamada's invention in Stein's invention to come up with transmitting the

acknowledgement message for messages saved to persistent storage. The motivation

for doing so would have been so that the client knows that message is going to be

delivered properly.

As per claim 26-27 they teach same limitations as claim 18,19 respectively.

Therefore rejected under same basis.

### Response to Arguments

Applicant's arguments with respect to claims 1,13,16,24 have been considered

but are deemed non-persuasive.

As per remarks, applicant stated the following:

A). Applicant stated, Chandrasekaran, Hamada neither teaches "determining

whether the attempting to deliver the message was successful"

B). Applicant states, Chandrasekaran, Hamada neither teaches "if the attempting to deliver the message was not successful, continuing to store the message in the non-persistent storage for a delay interval"

C). Applicant states Chandrasekaran does not disclose "after the delay period has elapsed saving the message to persistent storage so that message can be retrieved and delivered"

As per remark A, Examiner respectfully disagrees with the applicant because in column 11 lines 8-22, Chandrasekaran teaches storing in a table within non-volatile memory a message w/ UID value and initial states "prepared". The prepared state indicates the message has been sent but that an acknowledge message has not yet been received for the message from the destination site (determining whether the attempting to deliver was successful). Therefore Chandrasekaran teaches the claimed limitations.

As per remark B, Examiner respectfully disagrees with the applicant because in column 7 lines 55-64, Hamada teaches storing the message demand ID in the volatile memory (non-persistent storage) and then transmitting the message to the server, when a response from the server cannot be received even after the expiration of the predetermined period (if the attempting to deliver was not successful) retransmitting the message with the same demand ID is performed (continuing to store the message in the non-persistent storage for a delay interval) . That means the retransmission of the message is done which means the demand ID is still stored in the volatile memory. Therefore Hamada teaches the claimed limitations.

As per remark C, Examiner respectfully disagrees with the applicant because in column 7 lines 27-40, Chandrasekaran teaches storing the propagation sequence number, the UID and an initial propagation state ("propagated message data") into a propagation state that is maintained in the nonvolatile memory. Examiner would like to point out according to the specification of the current application its does not store the actual message data in the persistent storage, it stores a pointer or reference to a memory location storing the message (paragraph 21). Therefore Chandrasekaran does teach the claimed invention.

### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A). "Message Transfer in communication network" by Black et al. U.S. Patent # 5,878,056.

B). "Reliable Event Delivery System" by Kailash et al. U.S. Patent # 5,951,648

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

7.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dhairya A. Patel whose telephone number is 571-272-

5809. The examiner can normally be reached on 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

DAP

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